

PATTERNING METHOD WITH MICRO-CONTACT PRINTING AND ITS PRINTED PRODUCT

Abstract of the Disclosure

InA patterning method withfor micro-contact printing comprising involves the steps of: applying a resin on a master having projected patterns, hardening the resin and thereafter removing the hardened resin from the master to make a stamp of the resin; applying a molecular ink including hydrophobic molecules dispersed in a solvent on the stamp—and; forming micro-contact printed patterns of the hydrophobic molecular layer on a substrate by means of the stamp on which the molecular ink is applied-and; dipping the substrate with micro-contact printed patterns in a hydrophilic molecule solution dispersed in a solvent to give chemical modification to the areas of the surface of the substrate around the micro-contact printed patterns, the solution including hydrophilic molecules having a chain length shorter than the chain length of hydrophobic molecules included in the molecular ink is used as the hydrophilic molecule solution. According to the method, printed products having micro-contact printed patterns of a molecular level are obtained with thea contrast between the micro-contact printed patterns and the area of the surface of surface of the substrate around the micro-contact printed patterns.